Università degli Studi della Campania *Luigi Vanvitelli*

Dipartimento di Ingegneria

per il Corso di
HIGH PERFORMANCE AND CLOUD COMPUTING
Ingegneria Informatica Magistrale

e per i Corsi di Dottorato in
Ingegneria industriale e dell' informazione ed ambiente, design ed innovazione

Mercoledì 20 Aprile 2022 - ore 11:³⁰-13:⁰⁰
Aula Magna del Dipartimento di Ingegneria
via Roma 9 - Aversa

Prof. DIETER KRANZLMUELLER

Ludwig-Maximilians-Universitat Munich (LMU)
Chair of the Board of Directors of the Leibniz Supercomputing Centre (LRZ)

terrà un seminario su

Integrating Quantum- and High Performance Computing at LRZ

Quantum Computing (QC) has generated high expectations from science and industry, but today it is still unclear, whether it can deliver on all its promises. While first quantum systems are ready to move out of the physics labs into the data centers, there is still a substantial gap to overcome before these systems will be useful. At LRZ, we have initiated the Quantum Integration Center (QIC), which addresses the Computer Science and Software Engineering challenges by integrating QC with High Performance Computing (HPC). The basic idea is that HPC uses a Quantum Processing Unit (QPU) as an accelerator by delegating specific tasks, which are better suited to the QC. As a consequence, the overall achieved performance of scientific simulations can potentially be largely improved. In this talk, we will provide an overview of the current developments in the QIC@LRZ and the larger Munich Quantum Valley (MQV) initiative.

Il Docente
Prof. Beniamino Di Martino